

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of claims in the applications:

1-30. (Presently Canceled)

31. (New): A method for identifying a candidate compound for modulating a proliferative disorder, the method comprising:

- i) combining a compound to be tested with a sample comprising a polypeptide selected from the group consisting of:
 - a) a polypeptide which is at least 95% identical to the amino acid sequence of SEQ ID NO:2, wherein the polypeptide exhibits sulfatase activity; and
 - b) a polypeptide comprising a fragment of at least 400 contiguous amino acids of SEQ ID NO:2, wherein the polypeptide exhibits sulfatase activity;
- under conditions suitable for detecting a sulfatase activity;

- ii) assessing the ability of the compound to modulate the sulfatase activity; and
- iii) selecting a compound capable of modulating the sulfatase activity;

thereby identifying a candidate compound for modulating a proliferative disorder, wherein the proliferative disorder is selected from the group consisting of tumor establishment, tumor growth, tumor metastasis, epithelial cell proliferation, endothelial cell proliferation, neuronal cell growth and wound healing.

32. (New): The method of claim 31, wherein the sample is an isolated polypeptide, a membrane-bound form of an isolated polypeptide or a cell comprising the polypeptide.

33. (New): The method of claim 32, wherein the cell is derived from a cell selected from the group consisting of a tumor cell, an epithelial cell, a vascular endothelial cell or a neuronal cell.

34. (New): The method of claim 33, wherein the tumor cell is selected from the group consisting of a colon tumor cell, an ovarian cancer cell, a breast cancer cell, a lung cancer cell, and a glioblastoma cell.

35. (New): The method of claim 33, wherein the neuronal cell is selected from the group consisting of an astrocyte, a neuron of the cerebral cortex, and a neuron of the hypothalamus.

36. (New): The method of claim 31, wherein the compound is selected for the group consisting of a small molecule, a peptide or an antibody.

37. (New): The method of claim 31, wherein the polypeptide further comprises heterologous sequences.

38. (New): The method of claim 31, wherein the sulfatase activity is hydrolysis of sulfate ester bonds.

39. (New): A method for identifying a candidate compound for modulating a proliferative disorder, the method comprising:

- i) combining a compound to be tested with a sample comprising a polypeptide comprising the amino acid sequence of SEQ ID NO:2; under conditions suitable for detecting a sulfatase activity;
- ii) assessing the ability of the compound to modulate the sulfatase activity; and
- iii) selecting a compound capable of modulating the sulfatase activity;

thereby identifying a candidate compound for modulating a proliferative disorder, wherein the proliferative disorder is selected from the group consisting of tumor establishment, tumor growth, tumor metastasis, epithelial cell proliferation, endothelial cell proliferation, neuronal cell growth and wound healing.

40. (New): The method of claim 39, wherein the sample is an isolated polypeptide, a membrane-bound form of an isolated polypeptide or a cell comprising the polypeptide.

41. (New): The method of claim 40, wherein the cell is derived from a cell selected from the group consisting of a tumor cell, an epithelial cell, a vascular endothelial cell or a neuronal cell.

42. (New): The method of claim 41, wherein the tumor cell is selected from the group consisting of a colon tumor cell, an ovarian cancer cell, a breast cancer cell, a lung cancer cell, and a glioblastoma cell.

43. (New): The method of claim 41, wherein the neuronal cell is selected from the group consisting of an astrocyte, a neuron of the cerebral cortex, and a neuron of the hypothalamus.

44. (New): The method of claim 39, wherein the compound is selected for the group consisting of a small molecule, a peptide or an antibody.

45. (New): The method of claim 39, wherein the polypeptide further comprises heterologous sequences.

46. (New): The method of claim 39, wherein the sulfatase activity is hydrolysis of sulfate ester bonds.